

## CURRICULUM VITAE

**David Lee Cochran**

August 21, 2002

### I. GENERAL INFORMATION

#### B. Education:

<u>Degree</u>	<u>Degree</u>	<u>Institution, Location</u>
M.M.Sc.	Oral Biology	Harvard Medical School, Boston
Ph.D.	Biochemistry	Medical College of Virginia/VCU, Richmond VA
D.D.S.	Dentistry	Medical College of Virginia/VCU, Richmond VA
M.S.	Biochemistry	Medical College of Virginia/VCU, Richmond VA.
B.A.	Biology	University of Virginia

#### C. Post-Graduate Training:

<u>Degree</u>	<u>Major</u>	<u>Institution, Location</u>
Diplomate	Periodontics	American Board of Periodontology
Certificate	Periodontology	Harvard School of Dental Medicine, Boston

#### D. Academic Appointments:

<u>Year</u>	<u>Position</u>	<u>Institution/Location</u>
1992-present	Professor and Chair	Department of Periodontics The University of Texas Health Science Center at San Antonio
1992-present	Affiliate Professor	Department of Biochemistry and Molecular Physics, Medical College of Virginia/VCU
1989-1992	Associate Professor	Department of Periodontics, Medical College of Virginia/VCU

1989-1992	Director, Postgraduate Periodontics	Medical College of Virginia/VCU Richmond VA
1986-1992	Joint Appointment	Department of Biochemistry and Molecular Physics, Medical College of Virginia/VCU
1985-1989	Assistant Professor	Department of Periodontics, Medical College of Virginia/VCU
1986-1992	Member Graduate Faculty	Medical College of Virginia/VCU
1985	Instructor	Department of Periodontics, Harvard School of Dental Medicine
1981-1982	Clinical Instructor	Department of General Dentistry, Medical College of Virginia/VCU
1981-1982	Clinical Instructor	Department of Oral Pathology, Medical College of Virginia/VCU
1975-1982	Teaching Assistant	Department of Biochemistry, Medical College of Virginia/VCU

**G. Honors and Awards**

2001-02	Board of Trustees-American Academy of Periodontology
2001	R. Earl Robinson Periodontal Regeneration Award
1999	Special Citation Award, American Academy of Periodontology
1997	R. Earl Robinson Periodontal Regeneration Award
1996	Awarded "André Schroeder Prize" - International Team for Oral Implantology (ITI) in Switzerland.
1995	Awarded "Alumni Star" Award - MCV/VCU by Biochemistry Department
1995	Awarded Fellowship in the International College of Dentists
1994	Awarded Fellowship in the American College of Dentists
1991	Pew National Dental Leadership Development Program Fellowship
1991	Apolonium Study Club
1987,88,89	Marshall For Graduation
1987	Best Full-time Clinical Faculty Member Award (D-3 and D-4 classes), Clinic Day

- 1981 First Place - MCV Clinic Day, School of Dentistry
- 1980 First Place - Virginia Academy of Science
- MCV/VCU School of Dentistry representative - 16th Annual Student Research Conference
- MCV/VCU Cancer Center Summer Research Fellowship
- A.D. Williams Summer Research Fellowship
- 1977 Sidney Negus Research Award
- 1977 Honorable Mention - Virginia Academy of Science

## **II. TEACHING**

A. **Classroom/Laboratory:**

<u>Date</u>	<u>Course, Title/Clock Hours</u>	<u>S*/L**</u>	<u>Hours Class/ Lab</u>	<u>Role</u>
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2002	The Non-Submerged Approach to Dental Implants	2	Lecturer
2002	Implants in BMP Regenerated Bone	2	Lecturer
2002	Bone and Connective Tissue Course	4	Lecturer
2001-02	Pathogenesis Course	4	Lecturer
2000-01	Bone and Connective Tissue Course	4	Lecturer
2000-01	Pathogenesis Course	4	Lecturer
1999-00	Endosseous Dental Implant Course	2	Lecturer
1997-98	Pathobiology Course	4	Lecturer
1997-98	Bone, Periodontics Lecture	4	Lecturer
1996-97	Pathobiology Course	4	Lecturer
1996-97	Bone, Periodontics Lecture Series	4	Lecturer
1995-96	Pathobiology Course	4	Lecturer
1992-93	Bone, Periodontics Lecture Series	3	Lecturer
1993-94	Biomedical Core Course	2	Lecturer
1993-94	Pathobiology	4	Lecturer
1993-94	Literature Review	8	Lecturer
1994-95	Bone & CT Biology Course	12	Director
1995-96	Periodontal Lecture Series	6	Lecturer
1995-96	Literature Seminar Series	12	Director

**B. Clinical Teaching:**

<u>Date</u>	<u>Setting</u>	<u>S*/L*</u>	<u>Wks/Yr</u>	<u>Hrs/Wk</u>
2001-02	Post doctoral Clinic		44	4
2000-01	Post doctoral Clinic		44	4
1999-00	Post doctoral Clinic		44	4

1998-99	Post doctoral Clinic	44	4
1997-98	Postdoctoral Clinic	44	4
1996-97	Postdoctoral Clinic	44	4
1995-96	Postdoctoral Clinic	44	4
1994-95	Postdoctoral Clinic	44	4
1993-94	Postdoctoral Clinic	44	4
1992-93	Predoctoral Clinic	36	4
1992-93	Postdoctoral Clinic	44	4
1993-94	Predoctoral Clinic	36	4
1993-94	Postdoctoral Clinic	44	4
1994-95	Predoctoral Clinic	36	4
1994-95	Postdoctoral Clinic	44	4
1995-96	Postdoctoral Clinic	44	3

**C. Instructional Development:**

**1. Formal Study to Improve Teaching Abilities:**

Annual Dental School Retreats

**2. Current Research Concerning Teaching (e.g., Development of curriculum or teaching materials, methods, evaluation, etc.):**

None

**3. Bibliography Concerning Teaching (e.g., Textbook contributions and articles related to the topic of teaching. These should also be listed in Section III - Bibliography.):**

None

**III. RESEARCH**

**A. Bibliography**

**1. Books and/or Chapters:**

Shelton KR, Egle PM and Cochran DL: The nuclear lamins. Their properites and functions.



In the Wistar Symposium Series, 1982; Vol.2, Gerd G. Maul, Editor; Alan R. Liss, Inc., NY.

Graves DT and **Cochran DL**: Mesenchymal cell growth factors. Critical Reviews in Oral Biology and Medicine, 1990;1:17-36.

Graves DT and **Cochran DL**: Biologically active mediators: platelet-derived growth factor, monocyte chemoattractant protein-1, and transforming growth factor-B. Current Opinion in Dentistry, 1991;1:809-815. Stephen T. Sonis, Editor; Current Science, Philadelphia, PA.

**Cochran DL**: Bacteriologic monitoring of periodontal diseases: cultural, enzymatic, immunologic, and nucleic acid studies. Current Opinion in Dentistry, 1991;1:37-44. Stephen T. Sonis, Editor; Current Science, Philadelphia, PA.

**Cochran DL** and Mahn DH: Dental Implants and Regeneration, Part I. Overview and Biological Considerations. In: J.F. Hardin, Editor-in-Chief, Clark's Clinical Dentistry. Philadelphia: J.B. Lippincott Co., Revised edition 1992; chap 59:1-7.

Mahn DH and **Cochran DL**: Dental Implants and Regeneration, Part II. Overview and Biological Considerations. In: J.F. Hardin, Editor-in-Chief, Clark's Clinical Dentistry. Philadelphia: J.B. Lippincott Co., Revised edition 1992;chap 59A:1-11.

Wilson TG. ITI Dental Implants. Planning, Placement, Restoration, and Maintenance. Carol Stream IL., Quintessence Publishing Co., 1993 (**Cochran, DL**.Contributor to this publication as scientific advisor and reviewer).

**Cochran DL**, Kalkwarf KL, and Brunsvold MA. Plaque and Calculus Removal: Considerations for the Professional. Carol Stream IL., Quintessence Publishing Co., 1994.

Graves DL, **Cochran DL**. Periodontal regeneration with polypeptide growth factors. Current Opinion in Periodontology 1994;178-186.

Oates, T.W, **Cochran D.L.** Bone Interactions and regulation by inflammatory mediators. Curr. Opin. Periodontol., 1996; 3:34-44.

**Cochran DL**. Implant therapy I. *Ann Periodontol* 1996; 1:707-790.

**Cochran DL**. Scientific basis of the ITI system. Clinical Oral Implant Research, in press.

**Cochran DL**, Wozney JM. Growth factors in oral applications. Periodontology 2000, in press.

**Cochran DL**, Jones A, DeLaFontaine J, Mellonig JT, Boyan B, Carnes DL, Schwartz Z. Periodontal regeneration and localized osseous regeneration in the oral cavity. Tissue Engineering Applications in Maxillofacial Surgery and Periodontics, Part III, 1999, Quintessence Publishing Co., Inc.

Boyan BD, Dean DD, Lohmann CH, **Cochran DL**, Sylvia VL, Schwartz Z. The Titanium-Bone Cell Interface *in Vitro*: The Role of the Surface in Promoting Osteointegration. *Titanium in Medicine*, DM Brunette, P Tengvall, P Thomsen, and M Textor (editors), Springer-Verlag, Heidelberg, Germany, 2000, pp 561-585, 2001.

## 2. Papers Published or in Press: (peer reviewed articles)

**Cochran DL** and Shelton KR. Protein-protein interaction in the nuclear envelope. *FEBS Letters* 1976;71:245-247.

Shelton KR and **Cochran DL**. In vitro oxidation of intrinsic sulfhydryl groups yields polymers of the two predominant polypeptides in the nuclear envelope fraction. *Biochemistry* 1978;17:1212-1206.

**Cochran DL**, Yeoman LC, Egle PM and Shelton KR. Comparison of the major polypeptides of the erythrocyte nuclear envelope. *J Supramol Struct* 1979;10:405-418.

Shelton KR, Guthrie VH and **Cochran DL**. On the variation of the major nuclear envelope (Lamina) polypeptides. *Biochem Biophys & Res Commun* 1980;93:867-872.

Shelton, KR, Higgins LL, **Cochran DL**, Ruffolo Jr JJ, and Egle PM. Nuclear lamins of erythrocyte and liver. *J Biol Chem* 1980;255:10978-10983.

Shelton KR, Egle PM and **Cochran DL**. Nuclear envelope proteins: Identification of Lamin B subtypes. *Biochem Biophys & Res Comm* 1981;103:975-981.

Shelton KR, Guthrie VH and **Cochran DL**. Oligomeric structure of the major nuclear envelope protein Lamin B. *J Biol Chem* 1982;257:4328-4332.

Castellot JJ Jr, **Cochran DL** and Karnovsky MJ. Effect of heparin on vascular smooth muscle cells. I. Cell metabolism. *J Cellular Physiology* 1985;124:21-28.

**Cochran DL**, Castellot JJ Jr and Karnovsky MJ. Effect of heparin on vascular smooth muscle cells. II. Specific protein synthesis. *J Cellular Physiology* 1985;124:29-36.

**Cochran DL**. Glycosaminoglycan stimulation of calcium release from mouse calvariae. Specificity for hyaluronic acid and dermatan sulfate. *Calcified Tissue International* 1987;41:79-85.

**Cochran DL**, Perr HA, Graham MF and Diegelmann RF. Heparin induces specific protein release from human intestinal smooth muscle cells. *Biochem Biophys Res Com* 1987;142:542-551.

**Cochran DL** and Abernathy CK. Modulation of bone resorption by glycosaminoglycans. Effects of parathyroid hormone and Interleukin-1. *Bone* 1988;9:331-335.

**Cochran DL**, Castellot JJ Jr, Robinson JM, and Karnovsky MJ. Heparin modulates the secretion of a major excreted protein-like molecule by vascular smooth muscle cells. *Biochimica et Biophysica Acta* 1988;967:289-295.

Perr HA, Drucker DE, **Cochran DL**, Diegelmann RF, Lindblad WJ and Graham MF. Protamine selectively inhibits collagen synthesis by human intestinal smooth muscle cells and other mesenchymal cells. *J Cell Physiol* 1989;140:463-470.

Mariotti A and **Cochran DL**. Characterization of fibroblasts derived from human periodontal ligament and gingiva. *J Periodontol* 1990;61:103-111.

**Cochran DL**, Wisner LA, Richards MF, and Rouse CA. The induction of specific metabolic alterations in mouse calvarial organ cultures by glycosaminoglycans. *Arch Oral Biol* 1990;35(7):515-522.

Williams SR, Jiang Y, **Cochran D**, Dorsam G, Graves DT. Regulated expression of monocyte chemoattractant protein-1 in normal human osteoblastic cells. *Am J Physiol* 1992;263 (1Pt 1):C194-199.

**Cochran DL**, Rouse CA, Lynch SE, and Graves DT. Effects of platelet-derived growth factor isoforms on calcium release from neonatal mouse calvariae. *Bone* 1993;14:53-58.

Oates TW, Rouse CA, **Cochran DL**. Mitogenic effects of growth factors on human periodontal ligament cells *in vitro*. *J. Periodontol* 1993;64:142-148.

**Cochran DL**, Rouse CA. The effect of conditioned medium from connective tissue fibroblasts and epithelium on calcium release from mouse calvarial organ culture. *Arch of Oral Biol* 1993;38(1):61-65.

**Cochran DL**, Douglas HB. Augmentation of osseous tissue around nonsubmerged endosseous dental implants. *Int. J. Periodont Rest Dent* 1993;13(6):506-519.

**Cochran DL**, Simpson J. Weber, H-P, Buser D. Attachment and growth of periodontal cells on smooth and rough titanium. *Int J Oral Maxillofac Implants* 1994;9:289-297.

Oates TW, Rose K, Xie J, Graves DT, Collins J, **Cochran DL**. Receptor binding of PDGF-AA and PDGF-BB, and the modulation of PDGF receptors by TGF- $\beta$  in human periodontal ligament cells. *J. Cell. Physiol.* 1995;162:359-366.

Martin JY, Schwartz Z, Hummert TW, Schraub DM, Simpson J, Lankford J, Dean DD, **Cochran DL**, Boyan BD. Effect of titanium surface roughness on proliferation, differentiation and protein synthesis of human osteoblast-like cells (MG63). *J. Biomed Mater Res* 1995;29:389-401.

Alvares O, Klebe R, Grant G, **Cochran DL**. Growth factor effects on the expression of collagenase and TIMP-1 in periodontal ligament cells. *J. Periodontol* 1995;66:552-558.

Martin JY, Dean DD, **Cochran DL**, Simpson J, Boyan BD, Schwartz Z. Proliferation, differentiation, and protein synthesis of human osteoblast-like cells (MG63) cultured on previously used titanium surfaces. *Clin Oral Impl Res* 1996; 7:27-37.

Schwartz Z, Martin JY, Dean DD, Simpson J, **Cochran DL**, Boyan BD. Effect of titanium surface roughness on chondrocyte proliferation, matrix production, and differentiation depends on the state of cell maturation. *J of Biomed Mat Res* 1996; 30:145-155.

Schmitz JP, Dean DD, Schwartz Z, **Cochran DL**, Grant GM, Klebe RJ, Nakaya H, Boyan BD. Expression and membrane localization of matrix metalloproteinase activity in chondrocyte cultures. *J. Cell Biochem.* 1996; 61:375-391.

Keiswetter K, Schwartz Z, Hummert TW, **Cochran DL**, Simpson J, Dean DD, Boyan BD. Surface roughness modulates the local production of growth factors and cytokines by osteoblast-like MG63 Cells. *J. of Biomed Mat Res* 1996; 32:55-63.

Schwartz Z, Mellonig JT, Carnes DL, De La Fontaine J, **Cochran DL**, Dean DD, Boyan BD. Ability of commercial demineralized freeze dried bone allograft to induce new bone formation. *J. Periodontol*, 1996; 67:918-926.

Young SJ, Chaibi MS, Graves DT, Majzoub Z, Boustany F, **Cochran D**, Nummikoski P. Quantitative analysis of periodontal defects in a skull model by subtraction radiography using a digital imaging device. *J. Periodontol*, 1996; 67:763-769.

**Cochran DL**, Nummikoski PV, Higginbottom FL, Hermann JS, Makins SR, Buser D. Evaluation of an endosseous titanium implant with a sandblasted and acid-etched surface in the canine mandible. Radiographic results. *Clin Oral Impl Res*, 1996, 7:240-252.

Schmitz JP, Dean DD, Schwartz Z, **Cochran DL**, Grant GM, Klebe RJ, Nakaya H, Boyan BD. Chondrocyte cultures express matrix metalloproteinase mRNA and immunoreactive protein; stromelysin-1 and 72 kDa gelatinase are localized in extracellular matrix vesicles, *J Cell Biochem* 1996, 61:375-391.

Nakaya H., Kami K., Tran A.M., Cochran D.L. Effects of monensin on the immunocytochemical detection of matrix metalloproteinase 3 in human periodontal ligament cells, *Japanese Journal*, 1996; 38(1): 48-53.

Kieswetter K, Schwartz Z, Hummert TW, Cochran DL, Simpson J, Dean DD, and Boyan BD. Surface roughness modulates the local production of growth factors and cytokines by osteoblast-like MG-63 cells, *J of Biomedical Materials Research* 32:55-63, 1996.

Nakaya H, Oates TW, Hoang AM, Kamoi K, **Cochran DL**. Effects of interleukin-1 $\beta$  on matrix metalloproteinase-3 levels in human periodontal ligament cells. *J. Periodontol*, 1997; 68:517-523.

**Cochran DL**, Hermann J, Schenk R, Higginbottom F, Buser D. Biologic width around titanium implants. A histometric analysis of the implanto-gingival junction around unloaded and loaded nonsubmerged implants in the canine mandible. *J Periodontol*, 1997, 68:186-198.

**Cochran, DL**, Nummikoski PV, Jones AA, Makins SR, Turek TS, Buser D. 1997. Radiographic analysis of regenerated bone around endosseous implants in the canine using recombinant human bone morphogenetic<sup>1</sup> protein-2. *Int J Oral Maxillofac Implants*, 1997; 12:739-748.

Hermann, JS, **Cochran DL**, Nummikoski PV, Buser D. Crestal bone changes around titanium implants: A radiographic evaluation of unloaded nonsubmerged and submerged implants in the canine mandible. *J. Periodontol*, 1997; 68:1117-1130.

Hoang AM, Chen D, Oates TW, Jiang C, Harris SE, **Cochran DL**. Development and Characterization of a Transformed Human Periodontal Ligament Cell Line. *J Periodontol*, 1997; 68: 1054-1062.

Howell TH, Fiorellini J, Jones A, Alder M, Nummikoski P, Lazaro M, Lilly L, **Cochran D**. A feasibility study evaluating rhBMP-2/absorbable collagen sponge device for local alveolar ridge preservation or augmentation. *Intl. Periodontics & Rest Dent* 1997; 17: 124-139.

**Cochran DL**, Schenk RK, Lussi A, Higginbottom FL, and Buser D. Bone response to unloaded and loaded titanium implants with a sandblasted and acid-etched surface: a histometric study in the canine mandible. *J Biomed. Mater Res*, 40:1-11, 1998.

Wilson TG Jr, Schenk R, Buser D, **Cochran D**. Implants placed in immediate extraction sites: a report of histologic and histometric analyses of human biopsies. *International Journal of Oral & Maxillofacial Implants*. 13(3):333-41, 1998.

Assuma R, Oates T, **Cochran DL**, Amar S, Graves DT. IL-1 and TNF antagonists inhibit the inflammatory response and bone loss in experimental periodontitis. *Journal of Immunology*, 1998; 160: 403-409.

Batzer R, Liu Y, **Cochran DL**, Szmuckler-Moncler S, Dean DD, Boyan BD, Schwartz Z. Prostaglandins mediate the effects of titanium surface roughness on MG63 osteoblast-like cells and alter cell responsiveness to  $1\alpha, 25-(\text{OH})_2\text{D}_3$ . *J Biomed Mater Res*, 41, 489-96, 1998.

Weber HP, **Cochran DL**. The soft tissue response to osseointegrated dental implants. *J Prosthetic Dent*. 1998, 79 (1): 79-89.

Schwartz Z, Somers A, Mellonig JT, Carnes, Dean DD, **Cochran DL**, Boyan BD. Ability of commercial demineralized freeze-dried bone allograft to induce new bone formation is dependent on donor age but not gender. *J Periodontology*, 1998; 69:470-478.

Lovelace TB, Mellonig JT, Meffert RM, Jones AA, Nummikowski PV, **Cochran DL**. Clinical Evaluation of Bioactive Glass in the Treatment of Periodontal Osseous Defects in Humans. *J Periodontol*, 1998; 69:1027-1035.

Schwartz Z, Somers, A, Mellonig JT, Carnes DL, Wozney JM, Dean DD, **Cochran DL**, Boyan BD. Addition of human recombinant bone morphogenetic protein-2 to inactive commercial human demineralized freeze-dried bone allograft makes an effective composite bone inductive implant material. *Journal of Periodontology*, 1998, 69:1337-1345.

Graves DT, Delima AJ, Assuma R, Amar S, Oates T, **Cochran D**. Interleukin-1 and tumor necrosis factor antagonists inhibit the progression of inflammatory cell infiltration toward alveolar bone in experimental periodontitis. *Journal of Periodontology*, 1998;69:1419-1425.

Buser, D, Nydegger T, Hirt HP, **Cochran DL**, Nolte L-P. Removal torque values of titanium implants in the maxilla of miniature pigs. *Int J Oral Maxillofac Implants* 1998; 13:611-619.

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Boyan BD, Batzer R, Kieswetter K, Liu Y, **Cochran DL**, Szmuckler-Moncler S, Dean, DD, Schwartz Z. Titanium surface roughness alters responsiveness of MG63 osteoblast-like cells to  $1\alpha, 25-(\text{OH})_2\text{D}_3$ . *J Biomed Mater Res*, 39:77-85, 1998.

Oates TW, Xie JF, Clinton S, Hoang AM, Graves DT, **Cochran DL**. PDGF-alpha receptor subunit expression down-regulated by IL-1beta in human periodontal ligament cells. *Journal of Dental Research*; 77(10):1791-8, 1998.

Boyan BD, Batzer R, Kieswetter K, Liu Y, **Cochran DL**, Szmuckler-Moncler S, Dean DD, Schwartz Z. Titanium surface roughness alters responsiveness of MG63 osteoblast-

like cells to 1  $\alpha$ ,25-(OH) $_2$ D $_3$ . *Journal of Biomedical Materials Research*; 39(1):77-85, 1998.

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Toback GA, Brunsvold MA, Nummikoski PV, Masters LB, Mellonig JT, **Cochran DL**. The Accuracy of Radiographic Methods in Assessing the Outcome of Periodontal Regenerative Therapy. *Journal of Periodontology*; 70(12):1479-89, 1999.

Richardson CR, Mellonig JT, Brunsvold MA, McDonnell HT, **Cochran DL**. Clinical evaluation of Bio-Oss®: a bovine-derived xenograft for the treatment of periodontal osseous defects in humans. *J Clin Periodontol* 1999; 26:421-428.

**Cochran DL**, Schenk R, Buser D, Wozney JM, Jones A. Recombinant human bone morphogenetic protein-2 stimulation of bone formation around endosseous dental implants. *J Periodontol*, 1999; 70:139-150.

Buser D, Nydegger T, Oxland T, **Cochran DL**, Schenk RK, Hirt HP, Snétivy D, Nolte LP. The interface shear strength of titanium implants with a sandblasted and acid-etched surface. A biomechanical study in the maxilla of miniature pigs. *J Biomed Mater Res* 45: 75-83, 1999.

Carnes DL Jr, De La Fontaine J, **Cochran DL**, Mellonig JT, Keogh B, Harris SE, Ghosh-Choudhury N, Dean DD, Boyan BD, Schwartz Z. Evaluation of 2 novel approaches for assessing the ability of demineralized freeze-dried bone allograft to induce new bone formation. *J Periodontol*. 70:353-63, 1999.

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Boyan BD, Sylvia VL, Liu Y, Sagun R, **Cochran DL**, Lohmann CH, Dean DD, Schwartz Z. Surface roughness mediates its effects on osteoblasts via protein kinase A and phospholipase A $_2$ . *Biomaterials*, 20(23-24):2305-10, 1999.

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Schwartz Z, Lohmann CH, Blau G, Blanchard CR, Soskolne WA, **Cochran DL**, Dean DD, Boyan BD. Re-use of implant coverscrews changes their surface properties but not clinical outcome. *Clin Oral Impl Res*, 11:183-194, 2000.

Hoang AM, Oates TW, and **Cochran DL**. In Vitro Wound Healing Responses to Enamel Matrix Derivative. *J Periodontol* 2000;71:1270-1277.

**Cochran DL**, Jones AA, Lilly LC, Fiorellini JP, and Howell H. Evaluation of Recombinant Human Bone Morphogenetic Protein-2 in Oral Applications Including the Use of Endosseous Implants: 3-Year Results of a Pilot Study in Humans. *J Periodontol* 2000;71:1241-1257.

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Nakaya H, Osawa G, Iwasaki N, **Cochran DL**, Kamoi K, and Oates TW. Effects of Bisphosphonate on Matrix Metalloproteinase Enzymes in Human Periodontal Ligament Cells. *J Periodontol* 2000; 71:1158-1166.



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- von Arx T, and **Cochran DL**. Rationale for the Application of the GTR Principle Using a Barrier Membrane in Endodontic Surgery: A Proposal of Classification and Literature Review. *Int J Periodontics Restorative Dent* 2001;21:127-139.
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Del Toro F, Lohmann CH, Bannister SR, Liu Y, Sylvia VL, **Cochran DL**, Schwartz Z, Dean DD, Boyan BD. Surface Topography Modulates Osteoblast Response to Shear Force. Submitted to the American Society for Bone and Mineral Research 23<sup>rd</sup> Annual Meeting, 2001.

Bannister SR, Lohmann CH, Dean DD, Sylvia VL, **Cochran DL**, Schwartz Z, and Boyan BD. Surface Roughness Play a Major Role in Osteoblast Response to Fluid Flow-Induced Shear Force. Surfaces in *Biomaterials* Foundation, 2001 Annual Symposium, Scottsdale, Arizona, August 29-September 1, 2001.

Lohmann CH, Dean DD, **Cochran DL**, Liu Y, Sylvia VL, Boyan BD, Schwartz Z. Effect of Porcine Fetal Enamel Matrix Derivative on Chondrocyte Proliferation, Differentiation, and Local Factor Production is Dependent on Cell Maturation State. Submitted for presentation at The 1<sup>st</sup> International Conference on the Growth Plate, San Antonio, Texas, June 15-19, 2001.

Tsai N, McManus LM, Hermann JS, Medina RU, Oates TW, Schenk RK, Mellonig JT, Buser D, **Cochran DL**. Location of Implant-Abutment Interface Influences Inflammation in Peri-Implant Soft Tissue. European Academy of Osseointegration, Milan, Italy, September 13-15, 2001.

Lohmann CH, Dean DD, **Cochran DL**, Liu Y, Sylvia VL, Boyan BD, Schwartz A. Enamel matrix derivative induces proliferation, but not maturation, of chondrocytes in the endochondral pathway: a mechanism for increasing the pool of BMP-responsive cells during osteoinduction. Orthopaedic Research Society, 48<sup>th</sup> Annual Meeting, Dallas, Texas, February 10-13, 2002.

Tandy E, Lohmann CH, Dean DD, Sylvia VL, **Cochran DL**, Boyan BD, Schwartz Z. Estrogen Modulates Female Human Osteoblast Response to Surface Topography. Submitted for the IADR/AADR/CADR 80<sup>th</sup> General Session (March 6-9, 2002) in the Mineralized Tissue Area of Review.

Schwitters C, Perinpanayagam H, Schneider G, Holtman K, Zaharias R, **Cochran D**, Stanford CM. Bone Sialoprotein Expression in UMR106-01BSP Osteoblasts Increases in vitro on Roughened Surfaces. Submitted for the IADR/AADR/CADR 80<sup>th</sup> General Session (March 6-9, 2002) in the Mineralized Tissue Area of Review.

Casasola D, Boyan BD, Bonewald LF, Paschalis EP, Lohmann CH, Rosser JL, **Cochran DL**, Dean DD, Schwartz Z, Boskey AL. Surface Topography Modulates BMP-2 Regulation of Calcification. Submitted for the IADR/AADR/CADR 80<sup>th</sup> General Session (March 6-9, 2002) in the Mineralized Tissue Area of Review.

Stanford C, Holtman K, Perinpanayagam H, **Cochran D**, Schneider G. Biphasic Cbfa-1 Expression in Mineralizing Osteosarcoma Cell Cultures. Submitted for the IADR/AADR/CADR 80<sup>th</sup> General Session (March 6-9, 2002) in the Mineralized Tissue Area of Review.

Boyan BD, Tosatti S, Textor M, Denzer A, Lohmann CH, Simpson J, Dean DD, **Cochran D**, Schwartz Z. Surface Morphology Modulates Osteoblast Response to PEG-modified Surfaces. Submitted for the *Biomaterials* Foundation 2002 Annual Symposium, 2002.

Tosatti S, Schwartz Z, Lohmann CH, Denzer A, Simpson J, Dean DD, **Cochran D**, Textor M, Boyan BD. Surface Chemistry Modulates Osteoblast Response to Titanium Surface Topography. Submitted for the *Biomaterials* Foundation 2002 Annual Symposium, 2002.

Lohmann CH, Tandy EM, Sylvia VL, Hell-Vocke AK, **Cochran DL**, Dean DD, Schwartz Z, Boyan BD. Response of Normal Female Human Osteoblasts (NHST) to 17 $\beta$ -Estradiol is Modulated by Implant Surface Morphology. Submitted for the SICOT/SIROT 2002 World Congress (August 23-30, 2002) San Diego, California.

Dickson J, James LJ, Tang J, Thomas HF, **Cochran DL**, Karsenty G, McCulloch CAG, Chen J. Locally Delivered Transcription Factor Cbfa1 Gene Enhances Periodontal Bone Repair and Regeneration. Submitted to the American Society for Bone and Mineral Research 24<sup>th</sup> Annual Meeting, 2002.

Dean DD, Boyan BD, Bonewald LF, Paschalis EP, Lohmann CH, Rosser J, **Cochran DL**, Schwartz Z, Boskey AL. BMP-2 Regulation of Calcification is Modulated by Substrate Microtopography. Submitted to the American Society for Bone and Mineral Research 24<sup>th</sup> Annual Meeting, 2002.

#### 4. Review, Editorials:

Manuscript Reviewer for:

*Clinical Oral Implants Research*, Switzerland

*Clinical and Experimental Immunology*, British Society for Immunology's editorial database of referees

*Immunology*, British Society for Immunology's editorial database of referees

*International Journal of Oral & Maxillofacial Implants*

*International Journal of Periodontics & Restorative Dentistry*

*Journal of Dental Research*

*Journal of Periodontology*

*Journal of Periodontology Research*

*The Journal of Evidence-Based Dental Practice*

*Implant Dentistry: The International Journal of Oral Implantology*

*Quintessence International*

**B. Areas of Research Interest:**

Cell biology, bone metabolism, growth factors, regeneration, fibroblasts, implantology

**IV. SERVICE**

**A. Professional Affiliations**

**1. Current Professional and Scientific Organizations and Societies**

<u>Year</u>	<u>Organization</u>
1996-Present	Academy of Osseointegration
1995-Present	International College of Dentists
1995-Present	American Society for Bone and Mineral Research
1995-Present	American College of Dentists, Texas Section
1992-Present	Southwest Society of Periodontist (SWSP)
1992-Present	San Antonio Dental Society
1992-Present	Texas Dental Association
Current	Omicron Kappa Upsilon
Current	American Society for Cell Biology
Current	Sigma Xi
Current	American Dental Association
Current	International Association for Dental Research (IADR)
Current	American Association for Dental Research (AADR)
1985-present	Member, American Association for Dental Research (AADR)

1985-present	Member, International Association for Dent Research (IADR)
1985-present	Member, American Academy of Periodontology (AAP)

## 2. Past and Current Positions and/or Offices Held in Professional Organizations

<u>Year</u>	<u>Organization/Position/Office</u>
2003-06	Chair of International Team for Oral Implantology Research Committee
2001-02	Consultant, ADA, Council on Scientific Affairs
2001-02	Advisor, Indonesian Study Group of ITI Dental Implant
2001-02	Program Chair, Academy of Osseointegration
2001-02	Treasurer, Southwest Society of Periodontists
2001-02	Budget and Finance Committee, SWSP
2001-02	Executive Co. Member, SWSP
2001-02	Central Office Co. Member, SWSP
2001-02	Exhibitor Co. Member, SWSP
2001-02	The American Academy of Periodontology, Member, Continuing Education Oversight Committee
2001-02	The American Academy of Periodontology, Member, Task Force for Distance Learning
2000-01	Budget and Finance Co. Chair, SWSP
2000-01	Treasurer-elect, Southwest Society of Periodontists
2000-01	AAP-Chair, Committee on Research, Science and Therapy
2000-01	AAP-Chair, Task Force on Distance Learning Options
2000-01	Southwest Society of Periodontists, Member of Board of Directors
1999-2002	Board of Directors, SWSP
1999-2002	Nominating Co. Member, SWSP
1999-2001	Scientific Affairs Co. Member, SWSP

1999-2001	Program Chair, Program Chair, Academy of Osseointegration
1999-2000	AAOMS-AAP Task Force on Implant Advertising
1999-2000	Academy of Osseointegration, Program Subcommittee
1999-2000	AAP-Special Consultant, Continuing Education Oversight Committee; Chair, Center on Research, Science and Therapy
1998-99	Scientific Affairs Co. Chair, SWSP
1997-99	AAP-Chair, Continuing Education Oversight Committee
1997-98	Scientific Affairs Co. Vice-Chair
1997	AAP-Member, Subcommittee on FDA Implant Guidance Documents
1996-00	AAP, Chair, Research, Science & Therapy Committee
1996-97	AAP, Chair, Ad Hoc Committee to Evaluate the Annual Meeting
1996-97	AAP, Consultant, Subcommittee on AIDS & Infectious Diseases
1996-97	AAP, Consultant, Subcommittee on Clinical Research Studies
1996-97	AAP, Consultant, Subcommittee on Conscious Sedation
1995-96	AAP, Member, World Workshop Review Team
1996-97	Academy of Osseointegration, Member, Program Subcommittee, Annual Meeting Committee
1995-96	AAP, Chair Ad Hoc Committee to Evaluate the Annual Meeting
1995-96	AAP, Consultant, Subcommittee on Research Submissions
1995-96	AAP, Chair, Program Planning Committee
1995	AAP, Member Research Submission Subcommittee
1994-97	AAP, Research, Science and Therapy Committee
1994-95	President-elect, IADR/AADR Periodontal Research Group
1993-present	Member, Corporate Committee, AAP Foundation
1993-94	Consultant, AAP Subcommittee on Research Submission
1993-94	Secretary, IADR/AADR Periodontal Research Group

1993-94	Member, AAP Program Subcommittee for 1995 meeting
1992-93	Chair, AADR Science Information Committee
1993-94	Member, SWSP Education Committee
1993-94	Member, SWSP Nominating Committee
1992-93	Chair, AADR Science Information Committee
1992-93	Treasurer, IADR/AADR Periodontal Research Group
1991-92	Member, IADR/AADR Periodontal Research Group
1990-92	Member, AADR Science Information Committee
1987-89	Richmond Dental Society, Safety Committee

### 3. Other Professional Activities:

<u>Year</u>	
2002	Consultant, International Team for Oral Implantology Basel, Switzerland
2002	Consultant, FDA Panel Meeting Gaithersburg, MD
2002	Board of Trustees Member, American Academy of Periodontology Chicago, IL
2002	Invited Speaker, Rocky Mountain Society of Periodontists Vail CO
2002	Board Member, Southwest Society of Periodontists Austin, TX
2002	Invited Speaker, BIORA'S 1 <sup>ST</sup> International Emdogan Gel Symposium Copenhagen, Denmark
2002	Consultant, International Team for Oral Implantology Bern, Switzerland
2002	Board of Trustees Member, American Academy of Periodontology Chicago, IL
2002	Participant, Video Taping for Distance Learning Ft. Lauderdale, FL
2002	Invited Speaker, Castle Dental Centers, Orapharma, Inc

Houston, TX

- 2002      Invited Speaker, Academy of Osseointegration Annual Session  
Dallas, TX
- 2002      Consultant, Genetics Investigators Meeting  
Dallas, TX
- 2002      Participant, AAP, Faculty Retention Meeting  
San Diego, CA
- 2002      Invited Speaker, Dentists and Staff, OraPharma, Inc.  
Dallas, TX
- 2002      Invited Speaker, Orapharma, Inc.  
Colorado Springs, CO
- 2002      Participant, Board Member, Southwest Society of Periodontists  
Houston, TX
- 2002      Invited Speaker, SA District Dental Hygienists  
San Antonio, TX
- 2002      Invited Speaker, SA Study Club, ITI  
San Antonio, TX
- 2002      Invited Speaker, Dentists & Staff, OraPharma, Inc.  
San Antonio, TX
- 2002      Invited Speaker, Missouri Academy of General Dentistry  
Kansas City, KS
- 2002      Participant, European Workshop on Periodontology/European Academy of Periodontology,  
Ittingen Switzerland
- 2002      Invited Speaker, Dentists and Staff, OraPharma, Inc.  
Austin, Texas
- 2002      Invited Speaker, Ohio State University  
Columbus, OH
- 2002      Invited Speaker, Dentists and Staff, OraPharma, Inc.  
St. Louis, MO
- 2002      Invited Speaker, Tennessee Periodontal Society  
Nashville, TN
- 2002      Board of Trustees Member, American Academy of Periodontology  
LaJolla, CA



2002                      Invited Speaker, Austria Annual Implant Conference

Kitzbuhel, Austria

- 2001 Invited Speaker, Dentists and Staff, OraPharma, Inc.  
Washington, DC
- 2001 Invited Speaker, Dentists and Staff, OraPharma, Inc.  
Denver, CO
- 2001 Invited Speaker, Dentists and Staff, OraPharma, Inc.  
Houston, TX
- 2001 Participant, Emerging Science Workshop Training Session,  
AAP  
Chicago, IL
- 2001 Research Co-Investigator, Motor Grant Review Application  
Bethesda, MC
- 2001 Invited Speaker, North American International Team for Oral  
Implantology Congress, Whistler, Canada
- 2001 Research Participant, International Team for Oral  
Implantology  
Basel, Switzerland
- 2001 Consultant, OraPharma, Inc. Scientific Advisory Board  
Meeting  
New York, NY
- 2001 Participant, American of Periodontology Planning Session  
Chicago, IL
- 2001 External Reviewer, Periodontic Department Oregon Health  
Sciences University, School of Dentistry,  
Portland OR
- 2001 Invited Speaker, Dentists and Staff, OraPharma, Inc.  
Dallas, TX
- 2001 Invited Speaker, Victoria and District Dental Society  
Vancouver, BC
- 2001 Invited Speaker, Dentists and Staff, OraPharma, Inc.  
Houston, TX
- 2001 Moderator, American Academy of Periodontology  
Philadelphia, PA
- 2001 Consultant, OraPharma Investigator's Advisory Meeting  
Glasgow, London
- 2001 Invited Speaker, Durango Dental Society, BIORA, Inc.  
Durango, Mexico
- 2001 Invited Speaker, Dentists and Staff, OraPharma, Inc.

Las Vegas, NV

- 2001      Invited Speaker, Longhorn Dental Group, BIORA, Inc.  
San Marcos, TX
- 2001      Invited Speaker, Scientific Conference of the Australian and  
New Zealand Academy of Periodontists  
Melbourne, Australia
- 2001      Board Member, Southwest Society of Periodontists Meeting  
San Antonio, TX
- 2001      Invited Speaker, Dentists and Staff, Ora Pharma, Inc.  
Austin, TX
- 2001      Consultant, Academy of Periodontology and the Academy of  
Osseointegration Planning Committee for the 2003 Meeting  
Chicago, IL
- 2001      Invited Speaker, Japanese ITI Symposium  
Tokyo, Osaka, Japan
- 2001      Invited Speaker, San Antonio Dental Group, BIORA, Inc.  
San Antonio, TX
- 2001      Participant, 2001 Tri-School Faculty Retreat  
Austin, TX
- 2001      Invited Speaker, Henry M. Goldman Symposium  
Boston, MA
- 2001      Research Participant, International Team for Oral  
Implantology  
Research Committee Annual Meeting  
Basel, Switzerland
- 2001      Invited Speaker, Oral Surgeons and Staff, North Central  
Baptist Hospital  
San Antonio, Texas
- 2001      Invited Speaker, New York Periodontology Symposium  
New York, NY
- 2001      Invited Speaker, Canadian Academy of Periodontology  
Annual Meeting  
Montreal, Canada
- 2001      Invited Speaker, Charlottesville Society of Periodontists  
Charlottesville, VA
- 2001      Consultant, OraPharma Scientific Advisory Board  
Philadelphia, PA
- 2001      Invited Speaker, OraPharma, Missouri/Kansas City  
Periodontal Society

Kansas City, KS

- 2001      Invited Speaker, Bone Symposium at Harvard  
Boston, MA
- 2001      Participant, AAP and RS & T Committee Meetings  
Chicago, IL
- 2001      Participant, Academy of Osseointegration Annual Meeting  
Toronto, Canada
- 2001      Special Consultant, American Academy of Periodontology CE  
Oversight Committee Meeting  
Chicago, IL
- 2001      Invited Speaker, Preceptorship in Dental Implantology, CDE  
San Antonio, TX
- 2001      Participant, American Association for Dental Research  
Annual Meeting  
Chicago, IL
- 2001      Board Member, Southwest Society of Periodontists Annual  
Meeting  
Dallas, TX
- 2001      Invited Speaker, Scientific Committee of the 3<sup>rd</sup> World  
Congress of Osseointegration  
Venice, Italy
- 2001      Participant, Interdisciplinary Care Conference  
Dallas, TX
- 2001      Invited Speaker, Georgia Periodontists Society Meeting  
Atlanta, GA
- 2001      Invited Speaker, Periodontal Symposium  
University of Southern California  
Los Angeles, CA
- 2001      Consultant, BIORA President's Meeting  
Chicago, IL
- 2000      Invited Speaker, The Greater New York Academy of  
Prosthodontics Scientific Meeting  
New York, NY
- 2000      Invited Speaker, Kantor Seminar of the Greater New York  
Academy of Prosthodontics, Department of Veterans Affairs  
New York, NY
- 2000      Research Participant, International Team for Oral  
Bern, Switzerland
- 2000      Invited Speaker, BIORA

Columbus Ohio

2000                      Invited Speaker, BIORA

Cincinnati, OH

- 2000 Consultant, Scientific Advisory Board Meeting for Ora  
Pharma  
Manhattan, NY
- 2000 Invited Speaker, BIORA  
Resin, WI
- 2000 Invited Speaker, International Team for Oral Implantology  
World Symposium  
Lucerne, Switzerland
- 2000 Panel Member, Federal drug Administration Dental Products  
Panel Meeting  
Rockville, MD
- 2000 Invited Speaker, American Academy of Periodontology  
Annual Meeting,  
Honolulu, Hawaii
- 2000 Moderator, CDE Course American Academy of  
Periodontology  
Maui, Hawaii
- 2000 Participant, Implantology Pre-course Curriculum University  
of Florida College of Dentistry  
Gainesville, FL
- 2000 Participant, AAP and AAOMS Meeting  
Chicago, Illinois
- 2000 Invited Speaker and attended the Gordon Research  
Conference on Periodontal Disease  
Oxford, England
- 2000 Participant, AAP Continuing Education Oversight Task  
Force on Distance Learning  
Chicago, Illinois
- 2000 Invited Speaker, Detroit/Windsor Dental Community Meeting  
Windsor, Ontario
- 2000 Research Participant, International Team for Oral  
Implantology Research Meeting.  
Bern, Switzerland
- 2000 Participant, AAP and AAOMS Task Force  
Meeting  
Chicago, Illinois
- 2000 Invited Speaker, 7th International Symposium on Periodontics  
and Restorative Dentistry on Clinical Observations on the Soft  
Tissue Health with Dental Implants  
Boston, Massachusetts

2000	Invited Speaker, Gerald M. Bowers Study Club Baltimore, Maryland
2000	Invited Speaker, ICOI/MAP Implant Institute Palm Harbor, Florida
2000	Consultant, OraPharma Scientific Advisory Board Meeting Philadelphia, Pennsylvania
2000	Invited Speaker, BIORA Philadelphia, Pennsylvania
2000	Invited Speaker, UTHSCSA - Continuing Dental Education San Antonio, Texas
2000	Invited Speaker, Eminent Scholar University of Oklahoma Health Science Center Oklahoma City
2000	Participant, AAP and AAOMS Joint Implant Advertising Meeting Chicago, Illinois
2000	Participant, Academy of Osseointegration 15th Annual Meeting New Orleans, Louisiana
2000	Participant, AAP Continuing Education Oversight Committee Chicago, Illinois
2000	Invited Speaker, Ontario Society for Osseointegration Toronto, Canada
2000	Reviewer, External Reviewer for Department of Periodontics at the University of Michigan Ann Arbor, Michigan
2000	Invited Speaker, Midwest Society of Periodontology Chicago, Illinois
2000	Research Participant, Ora Pharma Investigator Meeting Phoenix, Arizona
2000	Research Participant, North American ITI Congress Orlando, Florida
2000	Invited Speaker Southwest Society of Periodontists Winter Meeting Dallas, Texas
2000	Consultant, Colgate Oral Pharmaceutical Periodontal Advisory Board Meeting Newark, New Jersey



1999	Invited Speaker, BIORA New York City, New York
1999	Research Participant, Bone Symposium University of Bern, Bern, Switzerland
1999	Invited Speaker, Bone Engineering International Workshop Toronto, Canada
1999	Invited Speaker, BIORA Denver, Colorado
1999	Participant, AAP, Committee on Research, Science and Therapy Chicago, Illinois
1999	Participant, AAP, Continuing Education Oversight Committee Meeting Chicago, Illinois
1999	Invited Speaker, BIORA San Francisco, California
1999	Participant, AAP International Workshop for Classification of Periodontal Disease -- Chicago, Illinois
1999	Research Participant, ITI Research Committee Bern, Switzerland
1999	Invited Speaker, U.S. Army Dental Activity Fort Gordon, Georgia
1999	Invited Speaker, BIORA -- Boston, Mass
1999	Invited Speaker, BIORA -- Portland, Oregon
1999	Invited Speaker, BIORA -- Seattle, Washington
1999	Invited Speaker, Implant Overdenture Symposium, Montreal, Canada
1999	Invited Speaker, American Academy of Periodontology Annual Session San Antonio, Texas
1999	Research Participant, Organogenesis Animal Study Houston, Texas
1999	Research Participant, International Team for Oral Implantology (ITI) Vitznau, Switzerland
1999	Invited Speaker, University of Maryland Baltimore, Maryland
1999	Consultant, BIORA

- 1999            Research Participant, Genetics Institute  
                  Boston, Mass
- 1999            Research Participant, ADI --  
                  Birmingham, London
- 1999            Research Participant, University of Bern  
                  Bern, Switzerland
- 1999            Invited Speaker, Harvard School of Dental Medicine –  
                  Boston, Mass
- 1999            Invited Speaker, Canadian Academy of Periodontology –  
                  Toronto, Canada
- 1999            Invited Speaker, Continuing Dental Education Preceptorship  
                  Program  
                  San Antonio, Texas
- 1999            Research Participant,, ITI Research Committee Meeting,  
                  Board of Directors Meeting –  
                  Bern Switzerland
- 1999            Invited Speaker, Congress of the Society of Italiana  
                  Periodontics  
                  Milano, Italy
- 1999            Invited speaker, Centro Congressi Frentani, Universita Degli  
                  Studi Di Roma --  
                  Rome, Italy
- 1999            Invited speaker, Clinical Implant Dentistry Conference –  
                  Washington, DC
- 1999            Invited speaker, University of Louisville  
                  Louisville, Kentucky
- 1999            Invited Speaker, AAP, 1999 Implant Conference – Atlanta,  
                  Georgia
- 1999            Invited speaker, Houston Dental Study Club  
                  Houston, Texas
- 1999            Invited speaker, Academy of Osseointegration Annual  
                  Meeting  
                  Palm Springs, California
- 1999            Participant, Research, Science and Therapy Committee  
                  Meeting of the AAP  
                  Chicago, Illinois
- 1999            Participant, European Workshop on Periodontology and the  
                  AAP/AAO Representative --  
                  Thurgau, Switzerland

- 1999 Representative-Appointed by the AAP to attend a planning committee for a joint conference with the AAO  
St. Louis, Missouri
- 1998 Invited Speaker and Research Participant, ITI Teacher's Conference and Andre Schroeder Implant Symposium  
Bern, Switzerland
- 1998 Invited Speaker, Periodontal Review and Board Preparation, University of Maryland --  
Baltimore, MD
- 1998 Invited Speaker, Scientific Committee and Organization Committee of the ITI World Symposium --  
Boston, MA
- 1998 Invited Speaker, Upper New Your State Society of Periodontics --  
Albany, NY
- 1998 Research Participant, ITI Research Committee -- Bern, Switzerland.
- 1998 Invited Speaker, Periodontal and Restorative Conference for the American Academy of Periodontology --  
Chicago, IL
- 1998 Invited Speaker, University of Toronto --  
Toronto Canada
- 1998 Invited Speaker, New Jersey Society of Periodontics  
New Brunswick, NJ
- 1998 Consultant, KAVO Advisory Board --  
Chicago, IL
- 1998 Research Participant, Joint Investigators Meeting with OraPharma and PPD Pharmaco – New Studies.
- 1998 Research Participant, USA North American ITI Symposium.
- 1998 Research Presentation, Dental Products Panel of the FDA on Reclassification of Endosseous Dental Implants.
- 1997 Invited Speaker, 8th Annual New York University Implant Symposium,  
New York, NY
- 1997 Research Participant, ITI Straumann Switzerland Videoconference,  
San Antonio, TX
- 1997 Research Presentation to the Dental Products Panel of the FDA,  
Bethesda, MD

- 1997 Consultant, Colgate Oral Pharmaceuticals Periodontal  
Advisory Board,  
Newark, NJ
- 1997 Invited Speaker, University of Gent,  
Gent, Belgium
- 1997 Invited Speaker, 8th Dental ITI Congress,  
Zeist, Netherlands
- 1997 Research Consultant, Biora , Stockholm, Malmo;Vandersborg,  
Tylosand, Sweden
- 1997 Consultant, OraPharma Scientific Advisory Board  
Newark, NJ
- 1997 Invited Speaker, IV Jornadas Franco Argentinas de  
Odontologia Rehabilitacion Oral e Implantes,  
Sao Paulo, Argentina
- 1997 Research Participant, ITI Consensus Conference,  
Vitznau, Switzerland
- 1997 Consultant, OraPharma Scientific Advisory Board,  
Newark, NJ
- 1997 Invited speaker, University of Maryland at Baltimore,  
Periodontics Review Board Preparation,  
Baltimore, Maryland.
- 1997 Host annual meeting, Southwest Society of Periodontics,  
Sante Fe, New Mexico.
- 1997 Invited speaker, International Symposium on Periodontics  
Restorative Dentistry,  
Boston, MA
- 1997 Invited speaker, IV International Osseointegration, Brazilian  
Academy of Osseointegration,  
Sao Paulo, Brazil
- 1997 Research participant, ITI Research Committee,  
Bern, Switzerland
- 1997 Invited speaker, Tissue Engineering Symposium,  
Orlando, Florida
- 1997 Invited speaker, European Association for Osseointegration  
Annual Scientific Congress,  
Berne, Switzerland.
- 1997 Consultant, Demineralized Bone Matrix/Fibrin Sealant  
Advisory Board,  
Rockville, Maryland.

1997	Invited speaker, Advance ITI Surgery, Straumann, Toronto, Canada.
1996-97	Member, Education Committee, Academy of Osseointegration
1996-97	Member, Program Subcommittee, Annual Meeting Committee, Academy of Osseointegration
1996-1997	Strategic Planning Co. Member, Southwest Society of Periodontics
1996-1997	Prichard Prize Review Ad Hoc Co. Member
1996-1997	Annual Meetings Co. Member, Southwest Society of Periodontics
1996	Consultant, OraPharma Scientific Advisory Board, Newark, NJ.
1996	Invited speaker, Third International Congress on Tissue Integration in Oral and Maxillofacial Reconstruction, Tokyo, Japan
1996	Invited speaker, International Team for Oral Implantology, Philadelphia, P.A.
1996	Invited speaker, General Session of The American Academy of Periodontology Annual Session, New Orleans, Louisiana.
1996	Invited speaker, The American Academy of Periodontology Implant Conference, San Francisco, California.
1996	Invited speaker, University of Indiana, Indianapolis, Indiana.
1996	Presentation of abstract, International Association for Dental Research annual meeting, San Francisco, California.
1996	Invited speaker, ITI Scientific Training Session, Toronto, Canada.
1996	Invited speaker, International Symposium Sponsored By Quintessence, Australia.
1996	Invited speaker, Southwest Society of Periodontists Summer Meeting, Aspen, Colorado
1996	Research presentation, ITI World Symposium, Basel , Switzerland

1996	Invited speaker, AAP Implant Conference, San Francisco, California
1996	Editor, <i>Clinical Oral Implants Research</i>
1995-96	President, International Association of Dental Research, Periodontal Research Group
1995	Outside reviewer, Department of Periodontics, University of North Carolina Dental School
1995	Member, Organizing Committee for 10th International Conference on Periodontal Research
1995	Member, Program Planning Committee for ITI World Symposium
1995	Invited moderator, International Congress of Oral Implantology
1995	Invited moderator, American Association of Dental Research
1995-1996	Annual Meetings Co. Chair
1995-1996	Exhibitor Ad Hoc Co. Member
1995-present	Abstract Editor, <i>International Journal of Oral and Maxillofacial Implants</i>
1995-present	Editor, <i>Journal of Periodontal Research</i>
1994-present	Ad Hoc Reviewer, <i>Journal of Dental Research</i>
1994-1995	Annual Meetings Co. Vice-Chair
1994	Invited speaker, University of North Carolina Dental School Research Day
1994	Research presentation, Academy of Osseointegration
1993-1994	Nominating Co. Member
1993-present	Editor, Implant Section, <i>Clark's Clinical Dentistry</i>
1992-1994	Education Co. Member
1992-1993	IADR General Session in Chicago; Chair, Periodontal Pathogenesis and Abstract Reviewer
1992-present	Periodontal Section Editor, <i>Quintessence International</i>
1992	American Academy of Periodontology Lunch & Learning "Bone Regeneration and Endosseous Dental Implants", Orlando, Florida.

1992	Continuing Education, University of Houston
1992	Continuing Education, Medical College of Virginia
1991-present	MCV Cancer Center Institutional Review Board, Core Grant
1991-present	Member Advisory Board, The Lederle Company
1991-1992	Special grant reviewer (Chair, 1992), NIH
1990-91	Abstract Reviewer, IADR Periodontal Pathogenesis
1990-present	Consultant to The Strauman Company/ITI Dental Implant
1990-present	Vice Chair, Brooks Medical Fellowship Review Committee, Sons of Confederate Veterans
1989	Chair, External Review Committee, Periodontal Research Center

**B. Patient Service:**

1994—present	10% of time devoted to private Faculty Practice in Dental School
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**C. Committees:**

**Department**

<u>Date</u>	<u>Position</u>	<u>Role</u>
1992-1996	Committee on Graduate Studies	Chair

**School**

<u>Date</u>	<u>Position</u>	<u>Role</u>
1995	Dental School 25-Year Symposia	Chair
1992-1994	Task Force on Radiographic Services	Member
1993-1994	Task Force for Clinical Research Core Support	Member
1993-1995	Dental School Research Committee	Chairman
1994	Task Force for Delivery of Dental Implant Care	Member

**University**

<u>Date</u>	<u>Position</u>	<u>Role</u>
1996	Southern Association of Colleges and Secondary Schools Accreditation Steering Committee	Member

**D. Administrative Responsibilities:**

**1. Department, Division, Clinical Service, Coordinator, etc:**

<u>Date</u>	<u>Description</u>
1992-present	Chair, Department of Periodontics
1989-1992	Director, Graduate Periodontics